

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Lyle E. Devore, Jr., <i>et al.</i>	Group Art Unit: 2173
Serial No.: 10/674,127	Examiner: Watt, Chris A.
Filed: 9/29/03	Attorney Docket: 2063.013800
For: Method And Apparatus For Status Display With Intermediate Database Access	Client Docket: VS-00608C
	Confirmation #: 4275

**APPEAL BRIEF**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Applicant hereby submits this Appeal Brief to the Board of Patent Appeals and Interferences in response to the final Office Action dated June 7, 2007. (Applicants enclose herewith for the convenience of the Office a copy of the Notice of Appeal filed by facsimile on that date.) The fee for filing this Appeal Brief is \$500, and the Commissioner is authorized to deduct said fees from Williams, Morgan & Amerson, P.C. Deposit Account No. 50-0786/2063.013800/JAP.

**I. REAL PARTY IN INTEREST**

The present application is owned by Lockheed Martin Corporation.

**II. RELATED APPEALS AND INTERFERENCES**

Applicants, Applicants' representative(s), and the Assignee are not aware of any appeals, interferences, or judicial proceedings that are related to, may be affected by, might affect, or have a bearing on the Board's decision in this appeal. However, Applicants note that there are several related applications. At least some of the references cited in this case are also cited in at

least some of the following cases. The following applications that disclose and/or claim overlapping subject matter with the present application:

- U.S. Application Serial No. 10/654,818, entitled “Method And Apparatus For Rapidly Prototyping Status Display”, filed September 4, 2003, in the name of the inventors Lyle E. Devore, Jr., *et al.*;
- U.S. Application Serial No. 10/654,845, entitled “Method And Apparatus For Status Display”, filed September 4, 2003, in the name of the inventors Lyle E. Devore, Jr., *et al.*; and
- U.S. Application Serial No. 10/653,313, entitled “Method and Apparatus for Generating Custom Status Display”, filed September 4, 2003, in the name of the inventors Lyle E. Devore, Jr., *et al.*

Each of these applications is currently pending and is commonly assigned herewith.

### **III. STATUS OF THE CLAIMS**

Claims 10-11, 16-18, 20-23, 25-30, 34-41, 43-44, and 48-70 are pending in the case, claims 1-9, 12-15, 19, 24, 31-33, 42, and 45-47 having previously been canceled and claims 48-70 having previously been added during prosecution. The Office rejected each of claims 10-11, 16-18, 20-23, 25-30, 34-41, 43-44, and 48-70 as obvious under 35 U.S.C. §103(a) by U.S. Patent Publication No. 2002/0052954 (“Polizzi *et al.*”) in combination with U.S. Patent Publication 2002/0186257 (“Cadiz *et al.*”). Applicants appeal all the rejections in this appeal. For the convenience of the Office, Applicants identify the claims involved in this appeal as claims 10-11, 16-18, 20-23, 25-30, 34-41, 43-44, and 48-70.

### **IV. STATUS OF AMENDMENTS**

There were no amendments after the “final” Office Action.

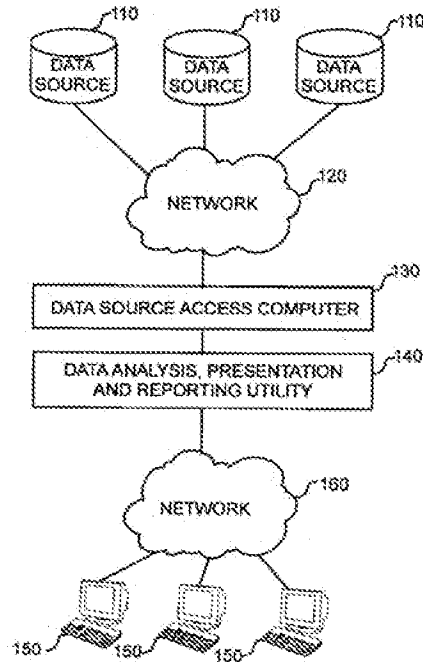
### **V. SUMMARY OF CLAIMED SUBJECT MATTER**

The present invention is a computer-implemented technique for accessing and displaying information. It is not uncommon in large commercial enterprises to have many large stores of data with only fragmented access. Different data stores may store data of different types or in

different formats. This can result, for example, from lack of integration over time within the organization or through acquisition of external systems that are not fully integrated. One solution is to simply hire enough programmers and systems analysts as it takes to perform the data conversions and systems integrations. However, large, full scale integrations of such computing systems and their data stores can be very costly and time consuming. Many commercial enterprises therefore simply live with the fragmented access. The present invention provides a way to overcome fragmentary access.

#### **A. SUMMARY DESCRIPTION OF THE INVENTION**

**FIG. 1**, reproduced below, schematically illustrates a computing environment including a series of data sources 110 connected via an optional network 120 to a data source access computer 130 which provides universal data source accessibility. ¶[0037] The data source access computer 130 interfaces with a data analysis, presentation and reporting utility 140. *Id.* Information from the data analysis, presentation and reporting utility 140 can be accessed by a plurality of user terminals 150 via optional network 160. *Id.* Note that this architecture is exemplary only, and but one computing environment in which the present invention may be employed. *Id.*

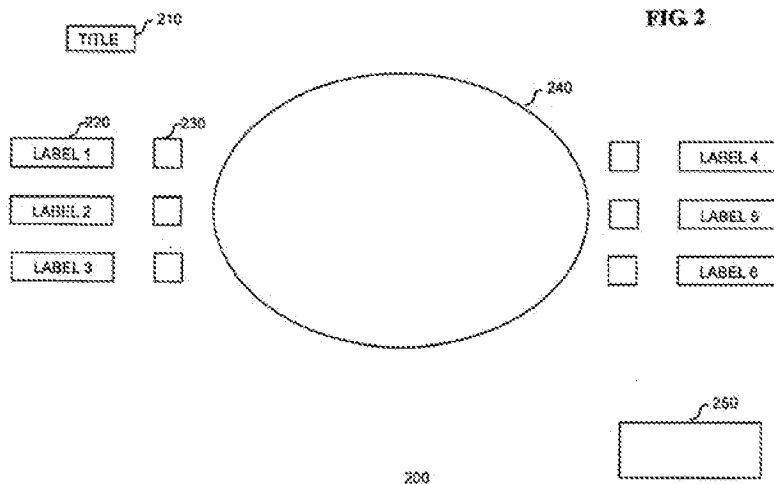


**FIG. 1**

With respect to the data sources 110, all manner of data sources are contemplated as usable with the present invention including, for example, SAP databases, Oracle databases, flat file databases, SQL databases, XML databases, and Btrieve databases. ¶[0038] Data sources beyond databases may also be used without limitation, such as Computer-Aided Design (CAD), Excel, Powerpoint and TIF data sources. *Id.* Moreover, data sources are not limited to file or database type sources. *Id.* The data sources may also include streaming data provided, for example, by a sensor or process control system. *Id.*

The present invention permits a user at one of the user computers 150 to seamlessly access and display information from any of the data sources 110. The data is displayed through screen displays referred to as “dashes”. **FIG. 2**, also reproduced below, generally illustrates a user interface dash 200. A dash 200 is any variety of user interface screen for displaying information. ¶[0040] As shown in **FIG. 2**, dash 200 includes a field for a title 210, a plurality of fields for labels 220 and, for each label 220, an associated field for an indicator 230. Dash 200 also includes a central display region 240 for the presentation of generated information to the user. Each label 220 may include a built-in function that can be invoked when the label 220 is

selected. ¶[0041] Indicators 230 can be configured to illustrate a status of information associated with the corresponding label 220.

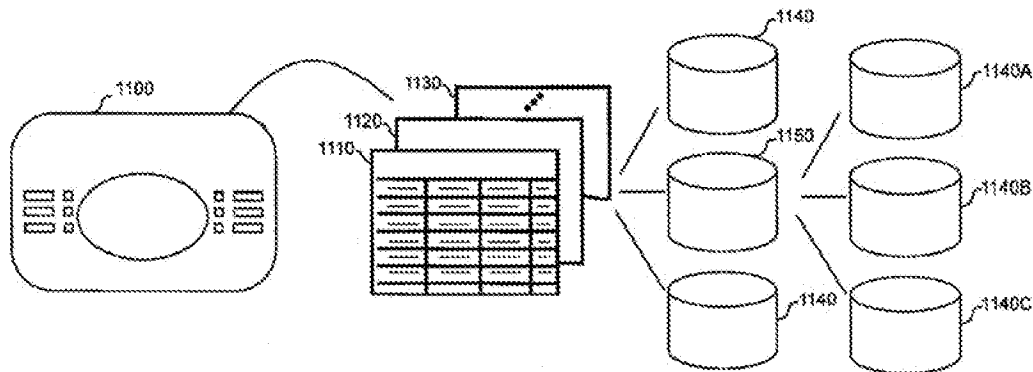


The specification includes additional disclosure regarding the content, use, population, and generation of the displays. For example, FIGS. 3A-3B illustrate an embodiment of a dash configured to report quality information ¶[0021], FIGS. 3C-3D illustrate embodiments of reports accessible via a dash ¶[0022], and **FIG. 3E** illustrates an embodiment of a database application screen accessible via a dash in accordance with the present invention ¶[0023]. These drawings are discussed in the text at ¶[0052]-¶[0063]. **FIG. 9** illustrates an embodiment of a computer network environment suitable for creating and using a dash in accordance with the present invention, ¶[0032], as discussed in ¶[0092]-¶[0097]. Additional information is provided to expand upon the generation and uses of such dashes.

The claims on appeal go to an embodiment in which dashes such as those discussed above are populated from an “intermediate database.” One such embodiment is shown in **FIG. 10B**, reproduced below. **FIG. 10B** generally illustrates a dash 1100 which provides links to a series of information screens 1110, 1120, 1130 which are supplied with data from direct databases 1140. ¶[0099] The information screens are also populated from an intermediate database 1150 (which may alternatively be referred to as a “datasource”). *Id.* The intermediate database 1150 is, in turn, linked to additional direct databases 1140A, 1140B, and 1140C. In this structure, information from direct databases 1140A, 1140B, and 1140C can be extracted and

imported into intermediate database 1150. Alternatively, information from direct databases 1140A, 1140B, and 1140C can be linked or streamed into intermediate database 1150.

**FIG. 10B**



The databases 1140, 1140A-1140C generally correspond to the data sources 110 shown in **FIG. 1**. A user at one of the user computers 150 can extract information from those data sources 110 through an intermediate datasource 1150, shown in **FIG. 10B** and other direct datasources 1140. The information is presented to the user through a digital dash 1100, which includes a control identified by a label 220, shown in **FIG. 2**. The label 220 has an associated function that, when the label 220 is selected, generates further reports 1110, 1120, 1130 shown in **FIG. 10B**. These further reports 1110, 1120, and 1130 may also be populated not only from the direct datasources 1140, but also through the intermediate datasource 1150.

## **B. THE INVENTION AS CLAIMED**

Turning now to the language of the claims, claims 10, 25, 28, 41, 48, 59, 63, 67 are independent. With respect to **claim 10**, a computer-based system (*e.g.*, 100, **FIG. 1**; ¶[0037]-¶[0038]) for presenting a selected one of a plurality display screens (*e.g.*, 300, **FIG. 3A**; ¶[0052]-¶[0057]), the invention comprises:

means (*e.g.*, 140, **FIG. 1**; ¶[0037]) for accessing (*e.g.*, ¶[0039]) a plurality of information sources (*e.g.*, 110, **FIG. 1**; ¶[0038]; 1140, 1140A-1140C, **FIG. 10B**; ¶[0099]-¶[0111]);

means (*e.g.*, 140, **FIG. 1**; ¶[0038]-¶[0039]) for generating (*e.g.*, **FIG. 9**, ¶[0092]-¶[0097]) a plurality of display screens (*e.g.*, 200, **FIG. 2**; ¶[0040]-¶[0051]), each display screen including at least one control (*e.g.*, 220, **FIG. 2**; ¶[0041]-¶[0042]), each control having at least one function (*e.g.*, ¶[0041]-¶[0042]) associated therewith, each display screen including at least one status indicator (*e.g.*, 230, **FIG. 2**; ¶[0040]-¶[0041]; ¶[0047]-¶[0051]) associated with a status indicator threshold (*e.g.*, ¶[0047], ¶[0051]);

means (*e.g.*, 150, **FIG. 1**; ¶[0040]-¶[0041]) for selecting (*e.g.*, ¶[0040]-¶[0041]) one of said plurality of display screens for display;

means (*e.g.*, 150, **FIG. 1**; ¶[0040]-¶[0041]) for selectively activating (*e.g.*, ¶[0040]-¶[0041]) a status indicator on said selected one of said plurality of display screens based on information located in at least one of said information sources and on at least one status indicator threshold;

means responsive (*e.g.*, ¶[0041], ¶[0047], ¶[0053]) to a control on said selected one of said plurality of display screens, for invoking a function (*e.g.*, ¶[0041], ¶[0047], ¶[0053]) associated with said control upon activation of said control; and

means (*e.g.*, ¶[0099], ¶[0104]-[0105]) for linking an intermediate datasource (*e.g.*, 1150, **FIG. 10B**; ¶[0099]-¶[0014], *esp.* ¶[0105]-¶[0106]) to at least one additional information source, and wherein at least one of said plurality of information sources is an intermediate datasource (*e.g.*, 1150, **FIG. 10B**; ¶[0099]-¶[0014], *esp.* ¶[0105]-¶[0106]).

With respect to **claim 25**, a computer-based system (*e.g.*, 100, **FIG. 1**; ¶[0037]-¶[0038]) for presenting an information display screen (*e.g.*, 300, **FIG. 3A**; ¶[0052]-¶[0057]), the invention comprises:

- a computer (*e.g.*, 150, **FIG. 1**; ¶[0037], ¶[0039]);
- an interface device (*e.g.*, 130, **FIG. 1**; ¶[0037], ¶[0039]) adapted to connect said computer to a plurality of information sources (*e.g.*, 110, **FIG. 1**; ¶[0038]; 1140,

1140A-1140C, **FIG. 10B**; ¶[0099]-¶[0111]) including an intermediate datasource (e.g., 1150, **FIG. 10B**; ¶[0099]-¶[0014], *esp.* ¶[0105]-¶[0106]);

a data link (**FIG. 10B**; ¶[0099], ¶[0104]-¶[0105]) for providing a link between an information source and an intermediate datasource so that information in an information source can be provided to said intermediate datasource;

a computer readable medium containing computer executable code (e.g., 140, **FIG. 1**; ¶[0038]-¶[0039]) for generating a display screen on said computer, said display screen including at least one control (e.g., 220, **FIG. 2**; ¶[0041]-¶[0042]), each said at least one control (e.g., 220, **FIG. 2**; ¶[0041]-¶[0042]) having at least one function (e.g., ¶[0041]-¶[0042]) associated therewith, said display screen including at least one status indicator (e.g., 230, **FIG. 2**; ¶[0040]-¶[0041]; ¶[0047]-¶[0051]) associated with a status indicator threshold (e.g., ¶[0047], ¶[0051]); and

wherein said computer readable media containing computer executable code additionally includes computer executable code for:

selectively activating (e.g., ¶[0040]-¶[0041]) said status indicator based on information located in at least one of said information sources and on at least one status indicator threshold, and responding to activation of a control on said display screen, for invoking a function (e.g., ¶[0041], ¶[0047], ¶[0053]) associated with said control on said display screen upon activation of said control.

With respect to **claim 28**, a computer-based system (e.g., 100, **FIG. 1**; ¶[0037]-¶[0038]) for presenting an information display screen (e.g., 300, **FIG. 3A**; ¶[0052]-¶[0057]), the invention comprises:

means (e.g., 140, **FIG. 1**; ¶[0037]) for accessing (e.g., ¶[0039]) a plurality of information sources (e.g., 110, **FIG. 1**; ¶[0038]; 1140, 1140A-1140C, **FIG. 10B**; ¶[0099]-¶[0111]), at least one of said information sources being an intermediate datasource (e.g., 1150, **FIG. 10B**; ¶[0099]-¶[0014], *esp.* ¶[0105]-¶[0106]);

means (e.g., ¶[0099], ¶[0104]-¶[0105]) for linking said intermediate datasource to at least one additional information source;



means (*e.g.*, 140, **FIG. 1**; ¶[0038]-¶[0039]) for generating (*e.g.*, **FIG. 9**, ¶[0092]-¶[0097]) a display screen, said display screen including at least one control (*e.g.*, 220, **FIG. 2**; ¶[0041]-¶[0042]), each said at least one control (*e.g.*, 220, **FIG. 2**; ¶[0041]-¶[0042]) having at least one function (*e.g.*, ¶[0041]-¶[0042]) associated therewith, said display screen including at least one status indicator (*e.g.*, 230, **FIG. 2**; ¶[0040]-¶[0041]; ¶[0047]-[0051]) associated with a status indicator threshold (*e.g.*, ¶[0047], ¶[0051]);

means (*e.g.*, 150, **FIG. 1**; ¶[0040]-¶[0041]) for selectively activating (*e.g.*, ¶[0040]-¶[0041]) said status indicator based on information located in at least one of said information sources and on at least one status indicator (*e.g.*, 230, **FIG. 2**; ¶[0040]-¶[0041]; ¶[0047]-[0051]) threshold; and

means responsive (*e.g.*, ¶[0041], ¶[0047], ¶[0053]) to a control on said display screen, for invoking a function (*e.g.*, ¶[0041], ¶[0047], ¶[0053]) associated with said control on said display screen upon activation of said control.

With respect to **claim 41**, a computer-based system (*e.g.*, 100, **FIG. 1**; ¶[0037]-¶[0038]) for presenting an information display screen (*e.g.*, 300, **FIG. 3A**; ¶[0052]-¶[0057]), the invention comprises:

- a computer (*e.g.*, 150, **FIG. 1**; ¶[0037], para[0039]);
- an interface device (*e.g.*, 130, **FIG. 1**; ¶[0037], para[0039]) adapted to connect said computer to a plurality of information sources (*e.g.*, 110, **FIG. 1**; ¶[0038]; 1140, 1140A-1140C, **FIG. 10B**; ¶[0099]-¶[0111]);
- a computer readable medium containing computer executable code for generating (*e.g.*, 140, **FIG. 1**; ¶[0038]-¶[0039]) a display screen, said display screen including at least one control (*e.g.*, 220, **FIG. 2**; ¶[0041]-¶[0042]), each said at least one control (*e.g.*, 220, **FIG. 2**; ¶[0041]-¶[0042]) having at least one function (*e.g.*, ¶[0041]-¶[0042]) associated therewith, said display screen including at least one status indicator (*e.g.*, 230, **FIG. 2**; ¶[0040]-¶[0041]; ¶[0047]-[0051]) associated with a status indicator threshold (*e.g.*, ¶[0047], ¶[0051]), said display screen further including a display region for presenting selected information to a user upon activation of said control;

a data link (**FIG. 10B**; ¶[0099], ¶[0104]-¶[0105]) providing a link between an information source and an intermediate datasource (e.g., 1150, **FIG. 10B**; ¶[0099]-¶[0014], *esp.* ¶[0105]-¶[0106]) so that information in an information source can be provided to said intermediate datasource, and

wherein said interface device is adapted to connect said computer to a plurality of information sources (e.g., 110, **FIG. 1**; ¶[0038]; 1140, 1140A-1140C, **FIG. 10B**; ¶[0099]-¶[0111]) including an intermediate datasource (e.g., 1150, **FIG. 10B**; ¶[0099]-¶[0014], *esp.* ¶[0105]-¶[0106]); and

wherein said computer readable media containing computer executable code additionally includes computer executable code for:

selectively activating (e.g., ¶[0040]-¶[0041]) said status indicator based on information located in at least one of said information sources and on at least one status indicator (e.g., 230, **FIG. 2**; ¶[0040]-¶[0041]; ¶[0047]-¶[0051]) threshold, and

responding (e.g., ¶[0041], ¶[0047], ¶[0053]) to activation of a control on said display screen, for generating a multi-axis scorecard display based on data stored in at least one of said plurality of information sources and presenting said scorecard display in said display region upon activation of said control.

With respect to **claim 48**, a computer-implemented method, the invention comprises:

receiving a user input to display information from a plurality of direct datasources (e.g., 1140, 1140A-1140C, **FIG. 10B**; ¶[0099]), the direct data sources further comprising information of a plurality of data types (e.g., ¶[0038]), in successive, differing levels of detail; and

displaying the information from the intermediate datasource (e.g., 1150, **FIG. 10B**; ¶[0099]-¶[0014], *esp.* ¶[0105]-¶[0106]) in accordance with the user input, the displayed information having been populated from the direct datasources.

With respect to **claim 59**, a program storage medium encoded with instructions that, when executed by a computer, perform a method, the method of the invention comprises:

receiving a user input to display information from a plurality of direct datasources (*e.g.*, 1140, 1140A-1140C, **FIG. 10B**; ¶[0099]), the direct data sources further comprising information of a plurality of data types (*e.g.*, ¶[0038]), in successive, differing levels of detail; and

displaying the information from the intermediate datasource (*e.g.*, 1150, **FIG. 10B**; ¶[0099]-¶[0014], *esp.* ¶[0105]-¶[0106]) in accordance with the user input, the displayed information having been populated from the direct datasources.

With respect to **claim 63**, a computer programmed to perform a method, the method of the invention comprises:

receiving a user input to display information from a plurality of direct datasources (*e.g.*, 1140, 1140A-1140C, **FIG. 10B**; ¶[0099]), the direct data sources further comprising information of a plurality of data types (*e.g.*, ¶[0038]), in successive, differing levels of detail; and

displaying the information from the intermediate datasource (*e.g.*, 1150, **FIG. 10B**; ¶[0099]-¶[0014], *esp.* ¶[0105]-¶[0106]) in accordance with the user input, the displayed information having been populated from the direct datasources.

With respect to **claim 67**, a computing system (*e.g.*, 100, **FIG. 1**; ¶[0037]-¶[0038]), the invention comprises:

a plurality of native datasources (*e.g.*, 110, **FIG. 1**; 1140, ¶[0038]; 1140A-1140C, **FIG. 10B**; ¶[0106]-¶[0107]) further comprising information of a plurality of data types (*e.g.*, ¶[0038]);

an intermediate datasource (*e.g.*, 1150, **FIG. 10B**; ¶[0099]-¶[0014], *esp.* ¶[0105]-¶[0106]) populated from the native datasources;

a plurality of user computers (*e.g.*, 150, **FIG. 1**; ¶[0039]); and

a utility (*e.g.*, 140, **FIG. 1**; ¶[0037], ¶[0039]) responsive to input from the user computers to customize the interaction of users with information in the native datasources when invoked and, in each interaction, capable of:

receiving a user input to display information from the native datasources in successive, differing levels of detail; and

displaying the information from the intermediate datasource in accordance with the user input, the displayed information having been populated from the native datasources.

Note that the references set forth above are to the disclosed embodiment(s) for illustrative purposes as required by rule and are not intended as limitations on the claims.

## **VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

Whether claims 10-11, 16-18, 20-23, 25-30, 34-41, 43-44, and 48-70 are obvious under 35 U.S.C. §103(a) by U.S. Patent Publication No. 2002/0052954 (“Polizzi *et al.*”) in combination with U.S. Patent Publication 2002/0186257 (“Cadiz *et al.*”).

## **VII. ARGUMENT**

The “final” Office Action rejected each of claims 10-11, 16-18, 20-23, 25-30, 34-41, 43-44, and 48-70 as obvious under 35 U.S.C. §103(a) by U.S. Patent Publication No. 2002/0052954 (“Polizzi *et al.*”) in combination with U.S. Patent Publication 2002/0186257 (“Cadiz *et al.*”). To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. M.P.E.P. § 706.02(j); *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). Each of the independent claims recites “an intermediate database” or an “intermediate datasource.” Each of the dependent claims incorporates this limitation by virtue of their dependency. 35 U.S.C. §112, ¶4. Neither Polizzi *et al.*, nor Cadiz *et al.*, nor the two in combination, teaches or suggests “an intermediate database” or “an intermediate datasource”. Thus, they do not render any claim obvious.

The Office no longer maintains that Polizzi *et al.* teaches an intermediate database. In the Office Action prior to the final Office Action from which this appeal is taken, the Office asserted that it did. More particularly, the Office alleged that Polizzi *et al.* anticipated the current claims. Applicants responded by arguing that Polizzi *et al.* omits any such teaching. The Office then withdrew the anticipation rejection and instituted the obviousness rejections in this appeal. Thus, the Office not only no longer maintains that Polizzi *et al.* teaches an intermediate database, it has impliedly conceded the proposition.

However, the Office does allege that Cadiz *et al.* teaches an “intermediate database”. Cadiz *et al.* teaches a computing apparatus that displays “items”. The “items” represent information that the user can retrieve from a respective datasource. Various tickets, however, represent information from different datasources. The Office relies on three passages in Cadiz for an intermediate datasource or an intermediate database. (Detailed Action, pp. 4-5) A close inspection of these passages reveals this to be incorrect.

The first passage is ¶[0024], which the Office alleges teaches “means for linking an intermediate datasource to at least one additional information source....” (Detailed Action, p. 4) This paragraph reads:

For example, information of interest to a user may include statistical information relating to a particular electronic file residing on a remote electronic database. Given this simple example, the user may be interested in knowing how many people have read the electronic file, or whether it has been modified. Consequently, *the customizable ticket includes instructions for using a "service" for linking to the remote server hosting the electronic file such that the can collect the statistical information as it becomes available.* Further, the ticket includes instructions as to what data is to be displayed, and which viewer is to be used to display that data. Such instructions for displaying the data may simply include instructions to display the number of people that have read the file, and/or instructions to change the color of the displayed information when the file has been modified by anyone other than the user. Clearly, this example is not meant to limit what information or data may be displayed, or how the information or data is to be displayed, as many other types of statistical or other data relating to such files, or to any other information of interest, can be collected and/or displayed in accordance with the present invention.

(emphasis added) The emphasis indicates the portion relied upon by the Office. Note, however, that the information to be displayed is retrieved directly “...to the remote server hosting the electronic file”—*i.e.*, the native or direct data source. There is no indication that the information to be displayed is retrieved from a different datasource populated from “...the remote server hosting the electronic file.”

The second passage is ¶[0080], which the Office alleges also teaches “means for linking an intermediate datasource to at least one additional information source....” (Detailed Action, pp. 4-5) This paragraph reads:

For example, particular information of interest to a user may be statistical information relating to a particular electronic file. Given this trivial example, the user may be interested in knowing how many people have read the electronic file, or whether it has been modified. ***Consequently, the customizable ticket 210 for watching or tracking the electronic file that the user is interested in includes instructions for using one or more of the services 230 for linking or connecting to the electronic file, i.e., one of the information sources 240, via any of a number of conventional electronic communications methods. Further, where the electronic file of interest resides locally, on the user's own computer, for example, the ticket 210 may include instructions for accessing, watching or tracking the file information directly without requiring the use of a service 230.***

(emphasis added) The emphasis once again indicates the portion relied upon by the Office. Once again, the item links or connects directly to the file, not to an “intermediate” representation of the file.

The third passage is ¶[0088], which the Office alleges teaches that one of the “information sources” is “an intermediate information source”. This passage reads:

Consequently, with respect to the services 230, it is clear that the infrastructure of the present invention must consider how items 200, i.e., ticket viewer pairs (210/220), ***communicate or interact with a particular information source or sources 240 so that such items can successfully retrieve, receive, or interact with information from any such sources.*** Additionally, in one embodiment, particular services 230 may be used by more than one item 200, thereby minimizing any required bandwidth. For example, where two or more items 230 must access the same database, i.e., multiple MAPI connections to an email store, or make an Internet connection to either retrieve or receive data, a single connection may be sufficient to provide for multiple tickets. In other words, wherever possible, the load is aggregated to avoid duplicative communications connections so as to limit any unnecessary use of bandwidth.

(emphasis added) Again, the emphasis indicates the portion relied upon by the Office. And, again, there is no teaching or suggestion of operating off an “intermediate” representation of data found in the data sources. This passage only states that multiple data sources can be directly accessed.

Thus, the art of record fails to teach or suggest “an intermediate database” or “an intermediate datasource”. The Office no longer maintains that Polizzi *et al.* teaches such and has

impliedly conceded that it does not. The Office alleges the Cadiz *et al.* does. But, as is established above, Cadiz *et al.* in fact only teaches directly accessing multiple, different datasources. Thus, Polizzi *et al.* and Cadiz *et al.* do not render obvious any of claims 10-11, 16-18, 20-23, 25-30, 34-41, 43-44, and 48-70. M.P.E.P. § 706.02(j); *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974).

Wherefore, Applicants pray that the rejections be REVERSED.

#### **VIII. CLAIMS APPENDIX**

The claims that are the subject of the present appeal – claims 10-11, 16-18, 20-23, 25-30, 34-41, 43-44, and 48-70 – are set forth in the attached “Claims Appendix.”

#### **IX. EVIDENCE APPENDIX**

There is no separate Evidence Appendix for this appeal.

#### **X. RELATED PROCEEDINGS APPENDIX**

There is no Related Proceedings Appendix for this appeal.

#### **XI. CONCLUSION**

Applicants respectfully submit that the claims are allowable over the art of record as is established above. Accordingly, Applicants request that the rejections be REVERSED and the claims allowed to issue.

Please date stamp and return the enclosed postcard to evidence receipt of this document.

Respectfully submitted,

Date: August 7, 2007

WILLIAMS, MORGAN & AMERSON  
CUSTOMER NUMBER: 23720  
10333 Richmond Dr., Suite 1100  
Houston, Texas 77042  
(713) 934-4053 ph

Jeffrey A. Pyle  
Jeffrey A. Pyle  
Reg. No. 34,904  
Attorney for Applicants



**APPENDIX**  
**(Claims in Issue)**

1. (Canceled)
2. (Canceled)
3. (Canceled)
4. (Canceled)
5. (Canceled)
6. (Canceled)
7. (Canceled)
8. (Canceled)
9. (Canceled)
10. A computer-based system for presenting a selected one of a plurality display screens comprising:
  - means for accessing a plurality of information sources;
  - means for generating a plurality of display screens, each display screen including at least one control, each control having at least one function associated therewith, each display screen including at least one status indicator associated with a status indicator threshold;
  - means for selecting one of said plurality of display screens for display;
  - means for selectively activating a status indicator on said selected one of said plurality of display screens based on information located in at least one of said information sources and on at least one status indicator threshold;
  - means responsive to a control on said selected one of said plurality of display screens, for invoking a function associated with said control upon activation of said control;
  - and

means for linking an intermediate datasource to at least one additional information source, and wherein at least one of said plurality of information sources is an intermediate datasource.

11. A computer-based system for presenting a selected one of a plurality of display screens in accordance with claim 10, further comprising means for user authentication for controlling access to predetermined information sources based on user identification information.

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. A computer-based system for presenting a selected one of a plurality of display screens in accordance with claim 10, wherein said function is an operation selected from the group consisting of a hyperlink, a script, a program, and a query.

17. A computer-based system for presenting a selected one of a plurality of display screens in accordance with claim 10, a plurality of status indicator thresholds are associated with a single status indicator, and wherein said means for selectively activating a status indicator on said selected one of said plurality of display screens differentially activates said status indicator depending on a relationship between said information located in at least one of said information sources and a corresponding one of said plurality of status indicator thresholds.

18. A computer-based system for presenting a selected one of a plurality of display screens in accordance with claim 10, wherein said status indicator is capable of displaying more than two status indications.

19. (Canceled)

20. A computer-based system for presenting a selected one of a plurality of display screens in accordance with claim 10, further comprising means, responsive to activation of said control, for

displaying information based on information obtained from at least one of said plurality of information sources, in a display region of said display screen.

21. A computer-based system for presenting a selected one of a plurality of display screens in accordance with claim 10, further comprising means, responsive to activation of said control, for displaying information based on information obtained from said intermediate datasource, in a display region of said display screen.

22. A computer-based system for presenting a selected one of a plurality of display screens in accordance with claim 21, wherein said means for linking said intermediate datasource to at least one additional information source obtains information from said at least one additional information source and stores said thus obtained information in said intermediate datasource.

23. A computer-based system for presenting a selected one of a plurality of display screens in accordance with claim 21, wherein said means for linking said intermediate datasource to at least one additional information source periodically obtains information from said at least one additional information source and stores said thus periodically obtained information in said intermediate datasource.

24. (Canceled)

25. A computer-based system for presenting an information display screen, comprising:  
a computer;  
an interface device adapted to connect said computer to a plurality of information sources including an intermediate datasource;  
a data link for providing a link between an information source and an intermediate datasource so that information in an information source can be provided to said intermediate datasource;  
a computer readable medium containing computer executable code for generating a display screen on said computer, said display screen including at least one control, each said at least one control having at least one function associated therewith, said display screen including at least one status indicator associated with a status indicator threshold; and

wherein said computer readable media containing computer executable code additionally includes computer executable code for:

selectively activating said status indicator based on information located in at least one of said information sources and on at least one status indicator threshold, and responding to activation of a control on said display screen, for invoking a function associated with said control on said display screen upon activation of said control.

26. (Canceled)

27. A computer-based system for presenting an information display screen in accordance with claim 25, wherein a plurality of status indicator thresholds are associated with a single status indicator, and wherein said computer readable media containing computer executable code additionally includes computer executable code for selectively activating said status indicator differentially depending on a relationship between said information located in at least one of said plurality of information sources or said intermediate datasource and a corresponding one of said plurality of status indicator thresholds.

28. A computer-based system for presenting an information display screen, comprising:

- means for accessing a plurality of information sources, at least one of said information sources being an intermediate datasource;
- means for linking said intermediate datasource to at least one additional information source;
- means for generating a display screen, said display screen including at least one control, each said at least one control having at least one function associated therewith, said display screen including at least one status indicator associated with a status indicator threshold;
- means for selectively activating said status indicator based on information located in at least one of said information sources and on at least one status indicator threshold;
- and
- means responsive to a control on said display screen, for invoking a function associated with said control on said display screen upon activation of said control.

29. A computer-based system for presenting an information display screen in accordance with claim 28, further comprising means for user authentication for controlling access to predetermined information sources based on user identification information.

30. A computer-based system for presenting an information display screen in accordance with claim 28, wherein said display screen includes a display region for presenting selected information to a user upon activation of said control.

31. (Canceled)

32. (Canceled)

33. (Canceled)

34. A computer-based system for presenting an information display screen in accordance with claim 28, wherein said function is an operation selected from the group consisting of a hyperlink, a script, a program, and a query.

35. A computer-based system for presenting an information display screen in accordance with claim 28, wherein a plurality of status indicator thresholds are associated with a single status indicator, and wherein said means for selectively activating said status indicator differentially activates said status indicator depending on a relationship between said information located in at least one of said information sources and a corresponding one of said plurality of status indicator thresholds.

36. A computer-based system for presenting an information display screen in accordance with claim 27, wherein said status indicator is capable of displaying more than two status indications.

37. A computer-based system for presenting an information display screen in accordance with claim 27, further comprising means, responsive to activation of said control, for displaying information based on information obtained from at least one of said plurality of information sources, in said display region.

38. A computer-based system for presenting an information display screen in accordance with claim 27, further comprising means, responsive to activation of said control, for displaying information based on information obtained from said intermediate datasource, in said display region.

39. A computer-based system for presenting an information display screen in accordance with claim 38, wherein said means for linking said intermediate datasource to at least one additional information source obtains information from said at least one additional information and stores said thus obtained information in said intermediate datasource.

40. A computer-based system for presenting an information display screen in accordance with claim 38, wherein said means for linking said intermediate datasource to at least one additional information source periodically obtains information from said at least one additional information and stores said thus periodically obtained information in said intermediate datasource.

41. A computer-based system for presenting an information display screen, comprising:

- a computer;
- an interface device adapted to connect said computer to a plurality of information sources;
- a computer readable medium containing computer executable code for generating a display screen, said display screen including at least one control, each said at least one control having at least one function associated therewith, said display screen including at least one status indicator associated with a status indicator threshold, said display screen further including a display region for presenting selected information to a user upon activation of said control;
- a data link for providing a link between an information source and an intermediate datasource so that information in an information source can be provided to said intermediate datasource, and
  - wherein said interface device is adapted to connect said computer to a plurality of information sources including an intermediate datasource; and

wherein said computer readable media containing computer executable code additionally includes computer executable code for:

selectively activating said status indicator based on information located in at least one of said information sources and on at least one status indicator threshold, and

responding to activation of a control on said display screen, for generating a multi-axis scorecard display based on data stored in at least one of said plurality of information sources and presenting said scorecard display in said display region upon activation of said control.

42. (Canceled)

43. A computer-based system for presenting an information display screen in accordance with claim 41, wherein said computer executable code for generating a multi-axis scorecard display is adapted to generate a multi-axis scorecard display based on data stored in at least one of said plurality of information sources and on data stored in said intermediate datasource.

44. A computer-based system for presenting an information display screen in accordance with claim 41, wherein said computer executable code for generating a multi-axis scorecard display is adapted to generate a multi-axis scorecard display based on data stored in at least two of said plurality of information sources.

45. (Canceled)

46. (Canceled)

47. (Canceled)

48. A computer-implemented method, comprising:  
receiving a user input to display information from a plurality of direct datasources, the direct data sources further comprising information of a plurality of data types, in successive, differing levels of detail; and

displaying the information from the intermediate datasource in accordance with the user input, the displayed information having been populated from the direct datasources.

49. The computer-implemented method of claim 48, wherein the user input includes receiving a selection of one of a hyperlink, a script, a program, and a query.

50. The computer-implemented method of claim 48, wherein the direct datasources comprise at least one of SAP databases, Oracle databases, flat file databases, SQL databases, XML databases, Btrieve databases, Access databases, FoxPro databases, Excel files, computer-aided design files, PowerPoint files, and TIF data sources.

51. The computer-implemented method of claim 48, wherein the data types include at least one of a database, a file, and a streaming data type.

52. The computer-implemented method of claim 48, wherein receiving the user input and displaying the information in successive, differing levels of detail includes:

displaying a first set of information including an indicator and a display function invoked upon selection of the indicator;

receiving a user input selecting the indicator and invoking the display function;

executing the display function to display a second set of information including a second indicator and a second display function invoked upon selection of the second indicator; and

iterating the receiving and the executing.

53. The computer-implemented method of claim 48, further comprising populating the intermediate datasource from the native datasources.

54. The computer-implemented method of claim 53, wherein populating the intermediate datasource includes one of copying the data, linking the data, and streaming the data from the native databases.



55. The computer-implemented method of claim 53, wherein populating the intermediate datasource includes assigning security protocols differing from those for the information in the native datasource.
56. The computer-implemented method of claim 53, wherein populating the intermediate datasource includes backing up at least a portion of the native datasources.
57. The computer-implemented method of claim 53, wherein populating the intermediate datasource includes translating the data type to another data type.
58. The computer-implemented method of claim 48, further comprising:  
receiving a second user input to display information from the native datasources; and  
displaying the information from the native datasources responsive to the second user input.
59. A program storage medium encoded with instructions that, when executed by a computer, perform a method, the method comprising:  
receiving a user input to display information from a plurality of direct datasources, the direct data sources further comprising information of a plurality of data types, in successive, differing levels of detail; and  
displaying the information from the intermediate datasource in accordance with the user input, the displayed information having been populated from the direct datasources.
60. The program storage medium of claim 59, wherein receiving the user input and displaying the information in successive, differing levels of detail includes:  
displaying a first set of information including an indicator and a display function invoked upon selection of the indicator;  
receiving a user input selecting the indicator and invoking the display function;  
executing the display function to display a second set of information including a second indicator and a second display function invoked upon selection of the second indicator; and  
iterating the receiving and the executing.

61. The program storage medium of claim 59, further comprising populating the intermediate datasource from the native datasources.
62. The program storage medium of claim 59, further comprising:  
receiving a second user input to display information from the native datasources; and  
displaying the information from the native datasources responsive to the second user input.
63. A computer programmed to perform a method, the method comprising:  
receiving a user input to display information from a plurality of direct datasources, the direct data sources further comprising information of a plurality of data types, in successive, differing levels of detail; and  
displaying the information from the intermediate datasource in accordance with the user input, the displayed information having been populated from the direct datasources.
64. The programmed computer of claim 63, wherein receiving the user input and displaying the information in successive, differing levels of detail includes:  
displaying a first set of information including an indicator and a display function invoked upon selection of the indicator;  
receiving a user input selecting the indicator and invoking the display function;  
executing the display function to display a second set of information including a second indicator and a second display function invoked upon selection of the second indicator; and  
iterating the receiving and the executing.
65. The programmed computer of claim 63, further comprising populating the intermediate datasource from the native datasources.
66. The programmed computer of claim 63, further comprising:  
receiving a second user input to display information from the native datasources; and  
displaying the information from the native datasources responsive to the second user input.

67. A computing system, comprising:  
a plurality of native datasources further comprising information of a plurality of data types;  
an intermediate datasource populated from the native datasources;  
a plurality of user computers; and  
a utility responsive to input from the user computers to customize the interaction of users with information in the native datasources when invoked and, in each interaction, capable of:  
receiving a user input to display information from the native datasources in successive, differing levels of detail; and  
displaying the information from the intermediate datasource in accordance with the user input, the displayed information having been populated from the native datasources.
68. The computing system of claim 67, wherein receiving the user input and displaying the information in successive, differing levels of detail includes:  
displaying a first set of information including an indicator and a display function invoked upon selection of the indicator;  
receiving a user input selecting the indicator and invoking the display function;  
executing the display function to display a second set of information including a second indicator and a second display function invoked upon selection of the second indicator; and  
iterating the receiving and the executing.
69. The computing system of claim 67, further comprising populating the intermediate datasource from the native datasources.
70. The computing system of claim 67, further comprising:  
receiving a second user input to display information from the native datasources; and  
displaying the information from the native datasources responsive to the second user input.